

**INFORMATION DISCLOSURE STATEMENT LISTING SHEET**

**Information Cited By Applicant(s) That May Be Material To  
The Prosecution Of The Subject Application**

Applicants: George et al. Attorney Docket No. BIOL0119  
Serial No.: 10/593,018 Group Art Unit: 1645  
Filed: October 22, 2008 Examiner:

Confirmation No. 5725

Title: IMAGE BASED QUANTITATION OF MOLECULAR TRANSLOCATION

**U.S. PATENT DOCUMENTS**

*Examiner Initial	ID	Document No.	Date	Name	Class	Sub- Class
	US1	7,567,695	7/28/2009	Frost et al.	382	129
	US2	2008/0240539	10/2/2008	George et al.	382	133
	US3	7,315,357	1/1/2008	Ortyn et al.	356	73
	US4	7,289,205	10/30/2007	Yaroslavsky et al.	356	417
	US5	7,221,457	5/22/2007	Jorgenson et al.	356	445
	US6	7,190,832	3/13/2007	Frost et al.	382	173
	US7	7,180,673	2/20/2007	Dowski, Jr.	359	637
	US8	7,139,415	11/21/2006	Finkbeiner	382	128
	US9	2006/0257884	11/16/2006	Brawley et al.	435	6
	US10	2006/0246481	11/2/2006	Finch et al.	435	6
	US11	7,087,877	8/8/2006	Ortyn et al.	250	201.2
	US12	7,079,708	7/18/2006	Riley et al.	382	294
	US13	7,057,732	6/6/2006	Jorgenson et al.	356	445
	US14	7,050,620	5/23/2006	Heckman	382	133
	US15	7,033,819	4/25/2006	Kim et al.	435	29
	US16	7,006,710	2/28/2006	Riley et al.	382	294
	US17	6,975,400	12/13/2005	Ortyn et al.	356	419
	US18	6,947,136	9/20/2005	Ortyn et al.	356	338
	US19	6,947,128	9/20/2005	Basiji et al.	356	73
	US20	6,934,408	8/23/2005	Frost et al.	382	129
	US21	6,927,922	8/9/2005	George et al.	359	708
	US22	6,906,792	6/14/2005	Ortyn et al.	356	28.5
	US23	6,875,973	4/5/2005	Ortyn et al.	250	201.3
	US24	6,873,733	3/29/2005	Dowski, Jr.	382	232
	US25	2005/0014129	1/20/2005	Cliffel et al.	435	004
	US26	6,778,263	8/17/2004	Ortyn et al.	356	28

# U.S. PATENT DOCUMENTS

*Examiner Initial	ID	Document No.	Date	Name	Class	Sub- Class
	US27	6,763,149	7/13/2004	Riley et al.	382	294
	US28	6,727,066	4/27/2004	Kaser	435	6
	US29	6,716,588	4/6/2004	Sammak et al.	435	7.23
	US30	6,707,551	3/16/2004	Ortyn et al.	356	338
	US31	6,671,044	12/30/2003	Ortyn et al.	356	326
	US32	6,658,143	12/2/2003	Hansen et al.	382	133
	US33	6,620,591	9/16/2003	Dunlay et al.	435	7.2
	US34	6,618,140	9/9/2003	Frost et al.	356	317
	US35	6,608,682	8/19/2003	Ortyn et al.	356	419
	US36	6,608,680	8/19/2003	Basiji et al.	356	338
	US37	6,583,865	6/24/2003	Basiji et al.	356	73
	US38	6,580,504	6/17/2003	Basiji et al.	356	338
	US39	2003/0104439	6/5/2003	Finch	435	6
	US40	6,563,583	5/13/2003	Ortyn et al.	356	400
	US41	6,549,664	4/15/2003	Daiber et al.	382	232
	US42	6,548,259	4/15/2003	Ward et al.	435	6
	US43	2003/0059093	3/27/2003	Rosania et al.	382	128
	US44	2003/0048931	3/13/2003	Johnson et al.	382	128
	US45	6,532,061	3/11/2003	Ortyn et al.	356	28
	US46	6,522,781	2/18/2003	Norikane et al.	382	203
	US47	6,510,319	1/21/2003	Baum et al.	455	442
	US48	6,507,391	1/14/2003	Riley et al.	356	28
	US49	6,473,176	10/29/2002	Basiji et al.	356	326
	US50	2002/0146734	10/10/2002	Ortyn et al.	435	6
	US51	2002/0126275	9/12/2002	Johnson	356	317
	US52	6,381,363	4/30/2002	Murching et al.	382	164
	US53	6,330,361	12/11/2001	Mitchell et al.	382	211
	US54	6,330,081	12/11/2001	Scholten	358	463
	US55	2001/0012620	8/9/2001	Rich	435	7.1
	US56	6,259,807	7/10/2001	Ravkin	381	133
	US57	2001/0006416	7/5/2001	Johnson	356	73
	US58	6,256,096	7/3/2001	Johnson	356	335
	US59	6,249,341	6/19/2001	Basiji et al.	356	73
	US60	6,249,314	6/19/2001	Yamamoto et al.	348	242
	US61	6,229,913	5/8/2001	Nayar et al.	382	154
	US62	6,211,955	4/3/2001	Basiji et al.	356	326
	US63	6,210,973	4/3/2001	Pettit	436	172
	US64	6,159,686	12/12/2000	Kardos et al.	435	6
	US65	6,156,465	12/5/2000	Cao et al.	430	30
	US66	6,116,739	9/12/2000	Ishihara et al.	353	31
	US67	6,108,082	8/22/2000	Pettipiece et al.	356	301
	US68	6,066,459	5/23/2000	Garini et al.	435	6
	US69	6,014,468	1/11/2000	McCarthy et al.	382	254

# U.S. PATENT DOCUMENTS

*Examiner Initial	ID	Document No.	Date	Name	Class	Sub- Class
	US70	6,007,996	12/28/1999	McNamara et al.	435	6
	US71	6,007,994	12/28/1999	Ward et al.	435	6
	US72	5,986,061	11/16/1999	Petska	530	352
	US73	5,985,549	11/16/1999	Singer et al.	435	6
	US74	5,959,953	9/28/1999	Alon	369	44.41
	US75	5,929,986	7/27/1999	Slater et al.	356	326
	US76	5,926,283	7/20/1999	Hopkins	356	419
	US77	5,900,942	5/4/1999	Spiering	356	400
	US78	5,855,753	1/5/1999	Trau et al.	204	484
	US79	5,848,123	12/8/1998	Strommer	378	98.8
	US80	5,844,670	12/1/1998	Morita et al.	356	124
	US81	5,831,723	11/3/1998	Kubota et al.	356	73
	US82	Re. 35,868	8/11/1998	Kosaka	250	574
	US83	5,764,792	6/9/1998	Kennealy	382	133
	US84	5,760,899	6/2/1998	Eismann	356	326
	US85	5,754,291	5/19/1998	Kain	356	338
	US86	5,733,721	3/31/1998	Hemstreet III et al.	435	6
	US87	5,695,934	12/9/1997	Brenner	435	6
	US88	5,686,960	11/11/1997	Sussman et al.	348	335
	US89	5,674,743	10/7/1997	Ulmer	435	287.2
	US90	5,644,388	7/1/1997	Maekawa et al.	356	73
	US91	5,633,503	5/27/1997	Kosaka	250	458.1
	US92	5,625,048	4/29/1997	Tsien et al.	536	23.4
	US93	5,621,460	4/15/1997	Hatlestad et al.	348	265
	US94	5,596,401	1/21/1997	Kusuzawa	356	23
	US95	5,568,315	10/22/1996	Shuman	359	487
	US96	5,548,395	8/20/1996	Kosaka	356	73
	US97	5,548,349	8/20/1996	Mizuguchi et al.	348	766
	US98	5,471,294	11/28/1995	Ogino	356	73
	US99	5,459,240	10/17/1995	Foxwell et al.	530	328
	US100	5,444,527	8/22/1995	Kosaka	356	73
	US101	5,436,144	7/25/1995	Stewart et al.	435	91.2
	US102	5,422,712	6/6/1995	Ogino	356	73
	US103	5,372,936	12/13/1994	Fraatz et al.	435	34
	US104	5,351,311	9/27/1994	Rogers et al.	382	45
	US105	5,272,354	12/21/1993	Kosaka	250	574
	US106	5,257,182	10/26/1993	Luck et al.	364	413.1
	US107	5,247,340	9/21/1993	Ogino	356	73
	US108	5,247,339	9/21/1993	Ogino	356	73
	US109	5,159,642	10/27/1992	Kosaka	382	134
	US110	5,159,398	10/27/1992	Maekawa et al.	356	73
	US111	5,159,397	10/27/1992	Kosaka et al.	356	73
	US112	5,153,916	10/6/1992	Inagaki et al	382	4

### U.S. PATENT DOCUMENTS

*Examiner Initial	ID	Document No.	Date	Name	Class	Sub-Class
	US113	5,141,609	8/25/1992	Sweedler et al.	204	180.1
	US114	5,122,453	6/16/1992	Martin et al.	435	7.24
	US115	5,096,807	3/17/1992	Leaback	435	6
	US116	4,857,453	8/15/1989	Ullman et al.	435	7
	US117	4,845,197	7/4/1989	Petersen et al.	530	387
	US118	4,786,165	11/22/1988	Yamamoto et al.	356	23
	US119	4,777,525	10/11/1988	Preston, Jr.	358	102
	US120	4,770,992	9/13/1988	Van den Engh et al.	435	6
	US121	4,737,932	4/12/1988	Baba	364	900
	US122	4,703,017	10/27/1987	Campbell et al.	436	501
	US123	4,677,680	6/30/1987	Harima et al.	382	1
	US124	4,662,742	5/5/1987	Chupp	356	39
	US125	4,635,293	1/6/1987	Watanabe	382	44
	US126	4,313,734	2/2/1982	Leuvering	23	230
	US127	3,922,069	11/25/1975	Kishikawa et al.	350	173
	US128	3,586,760	6/22/1971	Dillenburg	348	339
	US129	3,555,280	1/12/1971	Richards, Jr.	250	201

### FOREIGN PATENT DOCUMENTS

*Examiner Initial	ID	Document No.	Publication Date	Country	Class	Sub-Class	Translation?
	F1	WO 05/98430	10/20/2005	PCT	G01N	33/50	n/a
	F2	WO 05/90945	9/29/2005	PCT	G01N	15/14	n/a
	F3	EP 1 316 793	6/4/2003	EP	G01N	21	n/a
	F4	WO 02/79391	10/10/2002	PCT	C12N		n/a
	F5	WO 02/73200	9/19/2002	PCT	G01N	33/53	n/a
	F6	WO 02/35474	5/2/2002	PCT	G06T	7/00	n/a
	F7	WO 02/18537	3/7/2002	PCT	C12N		n/a
	F8	WO 02/17622	2/28/2002	PCT	H04N	5/232	n/a
	F9	WO 01/46675	6/28/2001	PCT	G01N	15/14	n/a
	F10	WO 01/11341	2/15/2001	PCT	G01N	15/14	n/a
	F11	WO 00/42412	7/20/2000	PCT	G01N	15/02	n/a
	F12	WO 00/14545	3/16/2000	PCT	G01N	33/58	n/a
	F13	WO 00/06989	2/10/2000	PCT	G01N		n/a
	F14	WO 99/64592	12/16/1999	PCT	C12N		n/a
	F15	EP 0 950 890	10/20/1999	EP	G01N	15/14	n/a
	F16	WO 99/24458	5/20/1999	PCT	C07K	1/10	n/a
	F17	WO 98/53300	11/26/1998	PCT	G01N	21/00	n/a
	F18	WO 98/53093	11/26/1998	PCT	C12Q	1/00	n/a
	F19	WO 97/26333	7/24/1997	PCT	C12N	15/12	n/a
	F20	EP 0 372 707	3/6/1996	EP	C07K	14/00	n/a
	F21	WO 95/20148	7/27/1995	PCT	G01N	21/64	n/a

## **FOREIGN PATENT DOCUMENTS**

*Examiner Initial	ID	Document No.	Publication Date	Country	Class	Sub-Class	Translation?
_____	F22	EP 0 281 327	6/30/1993	EP	G01N	33/546	n/a
_____	F23	WO 90/10715	9/20/1990	PCT	C12Q	1/68	n/a
_____	F24	EP 0 280 559	8/31/1988	EP	G01N	33/546	n/a
_____	F25	WO 88/08534	11/3/1988	PCT	G01N	33/543	n/a
_____	F26	EP 0 154 404	9/11/1985	EP	G06F	15/68	n/a

## **OTHER INFORMATION**

- |       |     |                                                                                                                                                                                                                                                     |
|-------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| _____ | O1  | Amann et al., "Fluorescent-Oligonucleotide Probing of Whole Cells for Determinative, Phylogenetic, and Environmental Studies in Microbiology," <i>Journal of Bacteriology</i> Vol. 172, No. 2: 762-770, February 1990.                              |
| _____ | O2  | Arkesteijn et al., "Chromosome Specific DNA Hybridization in Suspension for Flow Cytometric Detection of Chimerism in Bone Marrow Transplantation and Leukemia," <i>Cytometry</i> 19: 353-360, April 1995.                                          |
| _____ | O3  | Bains et al., "Flow Cytometric Quantitation of Sequence-Specific mRNA in Hemopoietic Cell Suspension by Primer-Induced <i>in Situ</i> (PRINS) Fluorescent Nucleotide Labeling," <i>Experimental Cell Research</i> 208: 321-326, September 1993.     |
| _____ | O4  | Barren III et al., "Method for Identifying Prostate Cells in Semen Using Flow Cytometry," <i>The Prostate</i> 36: 181-188, 1998.                                                                                                                    |
| _____ | O5  | Bauman et al., "Flow Cytometric Detection of Ribosomal RNA in Suspended Cells by Fluorescent In Situ Hybridization," <i>Cytometry</i> 9: 517-524, 1988.                                                                                             |
| _____ | O6  | Baumgartner et al., "Automated Evaluation of Frequencies of Aneuploid Sperm by Laser-Scanning Cytometry (LSC)," <i>Cytometry</i> 44: 156-160, 2001.                                                                                                 |
| _____ | O7  | Ben-Eliezer et al., "All-optical extended depth of field imaging system," <i>Journal of Optics A: Pure and Applied Optics</i> 5: S164-S169, 2003.                                                                                                   |
| _____ | O8  | Biggs et al., "Acceleration of iterative image restoration algorithms" <i>Applied Optics</i> Vol. 36, No. 8: 1766-1775, March 10, 1997.                                                                                                             |
| _____ | O9  | Boyle et al., "Isolation and Initial Characterization of a Large Repeat Sequence Element Specific to Mouse Chromosome 8," <i>Genomics</i> Vol. 12, No. 3: 517-525, 1992.                                                                            |
| _____ | O10 | Callet-Bauchu et al., "Distribution of the cytogenetic abnormality +i(3)(q10) in persistent polyclonal B-cell lymphocytosis: a FICTION study in three cases," <i>British Journal of Haematology</i> 99: 531-536, December 1997.                     |
| _____ | O11 | Ding et al., "Characterization and Quantitation of NF- $\kappa$ B Nuclear Translocation Induced by Interleukin-1 and Tumor Necrosis Factor- $\alpha$ ," <i>The Journal of Biological Chemistry</i> Vol. 273, No. 44: 28897-28905, October 30, 1998. |

### **OTHER INFORMATION**

- \_\_\_\_\_ O12 Distech et al., "Isolation and characterization of two repetitive DNA fragments located near the centromere of the mouse X chromosome," *Cytogenetics and Cell Genetics* 39: 262-268, 1985.
- \_\_\_\_\_ O13 Dragowska et al., "Measurement of DNA repeat sequence by flow cytometry," *Cytometry* Supplement 7: 51, October 1994.
- \_\_\_\_\_ O14 Engvall, Eva. "Enzyme Immunoassay ELISA and EMIT," *Methods in Enzymology* Vol. 70, Part A: 419-439, 1980.
- \_\_\_\_\_ O15 Fernandez-Lago et al., "Fluorescent Whole-Cell Hybridization with 16S rRNA-Targeted Oligonucleotide Probes To Identify *Brucella* spp. by Flow Cytometry," *Journal of Clinical Microbiology* Vol. 38, No. 7: 2768-2771, July 2000.
- \_\_\_\_\_ O16 George et al., "Extended depth of field using a logarithmic asphere" *Journal of Optics A: Pure and Applied Optics* 5: S157-S163, 2003.
- \_\_\_\_\_ O17 George et al., "Distinguishing Modes of Cell Death Using the ImageStream® Multispectral Imaging Flow Cytometer," *Cytometry Part A* 59A: 237-245, 2004.
- \_\_\_\_\_ O18 George et al., "Quantitative measurement of nuclear translocation events using similarity analysis of multispectral cellular images obtained in flow," *Journal of Immunological Methods* 311: 117-129, 2006.
- \_\_\_\_\_ O19 Gordy et al., "Visualization of Antigen Presentation by Actin-Mediated Targeting of Glycolipid-Enriched Membrane Domains to the Immune Synapse of B cell APCs." *Journal of Immunology* Vol. 172, No. 4: 2030-2038, February 15, 2004.

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Examiner's Signature

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Date

\*Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*\*Documents cited herein marked with an "\*\*\*" have not previously been cited in a priority application relied upon herein for an earlier filing date. Copies of any so-noted Foreign Patent Documents and Other Information are enclosed for the Examiner's use.

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